



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,105	01/11/2005	Marc Cuzin	122129	7015
25944 7590 03/18/2008 OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850				
EXAMINER KAFIMOSAVI, HOSEIN				
ART UNIT 4132		PAPER NUMBER		
MAIL DATE 03/18/2008		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/520,105

Applicant(s)

CUZIN ET AL.

Examiner

HOSEIN KAFIMOSAVI

Art Unit

4132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2005; Preliminary Amendments.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 05/04/2005, 03/31/2005
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION***Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

2. As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.

- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Regarding claim 1, the phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d). The same grounds apply to claim 2-10.
6. Claim 10 provides for the use of apparatus, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 10 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-5 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Winarta et al. (US 6,287,451 B1 henceforth referred to as "Winarta").

As to claim 1, Winarta discloses a biosensor, comprising: an electrically or electronically insulating support (20), comprising at least one useful face (21); a multiplicity of electrically or electronically conducting electrodes (defined by W1,W2,R) that are placed on the useful face (21) of the support in any predetermined operating arrangement, and are exposed in the sense that said electrodes may be brought together into contact with one and the same external medium, for example liquid; a plurality of ligands each multiply attached to respectively different electrodes (Figure 3A-E; Column 8, lines 43-53); a multiplicity of electrical terminals (22,24,26), corresponding to said electrodes (W1,W2,R) respectively, which are placed on a useful face (21) of the support (20) and are exposed in the sense that said terminals may be electrically or electronically connected to the outside independently of one another; a multiplicity of electrically or electronically conducting tracks (Figure 2), each running along one (21) of the faces of the support (20), connecting the multiplicity of electrodes (W1,W2,R) to the multiplicity of terminals (22,24,26) respectively, and a layer of an electrically or

electronically insulating material (30) coating one face (21) of the support (20), on the one hand at least partly covering said tracks (Figure 2) and on the other hand exposing both the electrodes (W1,W2,R) and the terminals (22, 24, 26), characterized in that, in combination on the one hand the multiplicity of electrodes (W1,W2,R) is placed in an extreme zone (210) on the opposite side from another extreme zone in which electrical terminals (22, 24, 26) are grouped together (220) and on the other hand the support (20) includes at least one flexible zone located between the two extreme zones (Column 7, lines 46-51).

As to claim 2, Winarta discloses a biosensor as above, characterized in that the entire support is flexible (Column 7, lines 46-51).

As to claim 3, Winarta discloses a biosensor as above, characterized in that the flexible zone can bend about at least one axis having a direction perpendicular to the direction of alignment of the operating arrangement of the electrodes (W1,W2,R) and of the group of electrical terminals (22, 24, 26) (Column 7, lines 46-51).

As to claim 4, Winarta discloses a biosensor as above, characterized in that the support (20) is a flexible sheet made of insulating material (Column 7, lines 44-45).

As to claim 5, Winarta discloses a biosensor as above, characterized in that each electrode has at least two adjacent ends connected together (Column 5, lines 47-50).

As to claim 10, all the limitations were addressed above with respect to claim 1.

Claim Rejections - 35 USC § 103

Art Unit: 4132

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being obvious over Winarta as applied to claim 1 above, and further in view of Hodges et al (US 6,475,360 B1).

As to claim 6, Winarta discloses the biosensor above, comprising of an electrically or electronically insulating support. Winarta does not disclose having electrically or electronically conducting track running along one of the faces of the support between an electrical terminal and an end covered with a layer of electrically or electronically insulating material.

Hodges discloses a heated biosensor, comprising of an electrically or electronically conducting track (6) running along one of the faces of the support (5) between an electrical terminal (8) and an end covered with a layer of electrically or electronically insulating material (7) (Column 4, lines 17-22).

It would have been obvious to one with ordinary skill in the art at the time of the invention to have the biosensor device of Winarta comprised of an electrically or electronically conducting track (6) running along one of the faces of the support (5) between an electrical terminal (8) and an end covered with a layer of electrically or electronically insulating material (7), as taught by Hodges, for the benefit of adding a heating electrode to the biosensor that generates heat for the reactions which makes assessment of analyte concentration possible in a much shorter time (Hodges at Column 3, lines 51-59; Column 6, lines 11-19).

As to claim 7, the intended use of the apparatus (biosensor) does not limit the scope of an apparatus claim from a prior art apparatus satisfying the claimed structural limitations. It is the Examiner's position that the track provided in the combination can provide a shielding function.

As to claim 8, Winarta in view of Hodges discloses the biosensor above, characterized in that two other electrically or electronically conducting tracks (2, 6) run between two other electrical terminals (8) in order to be connected to a reference potential, these being placed one face of the support (4) and the other respectively, and two respective ends that are each covered with electrically or electronically insulating material (1, 7) (Hodges at Figure 13; Column 7, lines 30-50).

11. Claim 9 is rejected under 35 U.S.C. 103(a) as being obvious over Winarta as applied to claim 1 above, and further in view of Say et al (US 6,134,461).

As to claim 9, Winarta discloses the biosensor above, comprising of an electrically or electronically insulating support. Winarta does not disclose having at least one electrical terminal placed on the useful face of the support, and the track that corresponds to it passing through the thickness of the support.

Say discloses a biosensor, characterized in that at least one electrical terminal (49a) is placed on the other face of the support (50), which is also a useful face, and the track (52) that corresponds to it passes through the thickness of the support (Figure 10; Column 15, lines 27-34).

It would have been obvious to one with ordinary skill in the art at the time of the invention to have the biosensor device of Winarta comprised of at least one electrical terminal (49a) is placed on the other face of the support (50), which is also a useful face, and the track (52) that corresponds to it passes through the thickness of the support, as taught by Say, for the benefit of having the electrical terminals contact the controls from a both sides of the support (50) (Say at Figure 10; Column 15, lines 27-34).

Correspondence / Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HOSEIN KAFIMOSAVI whose telephone number is (571)270-5271. The examiner can normally be reached on Mon - Fri, 7:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ward Jessica can be reached on (571) 272-1223. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. K./
Examiner, Art Unit 4132

/Jessica L. Ward/
Supervisory Patent Examiner, Art Unit 4132